

### **REMARKS**

This amendment is submitted in response to the Office Action dated July 1, 2005. Applicants appreciate the Examiner's review of the present application in which claims 1-12 currently stand rejected. Applicants have amended independent claims 5, 8 and 11 in order to further patentably distinguish the claimed invention from the cited references, taken either individually or in combination, and submit the present remarks. No new matter has been added by the amendment.

In light of the amendment and the remarks presented below, Applicants respectfully request reconsideration and allowance of all claims of the present application.

#### **Claim Rejections - 35 USC §103**

##### **Claims 1-4**

The Office Action rejected claims 1, 2 and 3 under 35 U.S.C. § 103(a) as being unpatentable over Park, et al. (U.S. Patent No. 6,714,799, hereinafter "Park") in view of Panzer (U.S. Patent No. 5,619,491). The Office Action rejected claims 4 under 35 U.S.C. § 103(a) as being unpatentable over Park in view of Grilli et al. (U.S. Patent No. 6,438,117).

Independent claim 1 recites, *inter alia*, specific data are transmitted using a CDMA data burst message in the case of authenticating the GSM service subscriber. Thus, an exemplary embodiment according to independent claim 1 includes a mobile terminal which transmits authentication messages via CDMA data burst.

As stated in the Office Action, Park is silent on the CDMA message being a CDMA data burst message. As such, the Office Action cites Panzer for disclosing such feature. Specifically, the Office Action states that Panzer discloses a CDMA transmission system which compresses words (i.e. messages) into data bursts to minimize the necessary bandwidth. However, Panzer is silent as to using data bursts for authentication purposes. To the contrary, the claimed invention is directed to authenticating via CDMA data bursts. Such feature allows a CDMA terminal employing the teaching of the present application to be used with minimal modification to present networks since more roaming subscribers can be accommodated (see page 13, lines 7-

16). As stated in the Office Action, Panzer's use of data bursts is for minimizing necessary bandwidth. Panzer does not contemplate the impact of increased authentication requirements, and accordingly, Panzer fails to provide any teaching or suggestion that specific data are transmitted using a CDMA data burst message in the case of authenticating the GSM service subscriber as claimed in independent claim 1.

Grilli discloses a system for allowing base station synchronization for handover in a hybrid GSM/CDMA network. Grilli also fails to teach or suggest that specific data are transmitted using a CDMA data burst message in the case of authenticating the GSM service subscriber as claimed in independent claim 1.

Since Park, Panzer and Grilli each fail to teach or suggest that specific data are transmitted using a CDMA data burst message in the case of authenticating the GSM service subscriber as claimed in independent claim 1, any combination of Park, Panzer and Grilli also fails to teach or suggest the subject matter of independent claim 1. Thus, Park, Panzer and Grilli, taken either individually or in combination, do not render independent claim 1 obvious. Claims 2-4 depend either directly or indirectly from independent claim 1, and thus include all the recitations of independent claim 1. Dependent claims 2-4 are therefore patentable for at least the same reasons as given above for independent claim 1.

Accordingly, Applicants respectfully submit that the rejections of claims 1-4 are overcome.

#### Claims 5-7

The Office Action rejected claims 5-7 under 35 U.S.C. § 103(a) as being unpatentable over Park in view of Tayloe (U.S. Patent No. 5,987,325).

Independent claim 5 is directed to a CDMA terminal including a cardholder in which a user identity module (UIM) of a CDMA subscriber may be installed and uninstalled. The CDMA terminal of independent claim 5 also includes a card interface for detecting whether a UIM card is installed in a cardholder and, in instances in which the card interface detects that the UIM card is installed in the cardholder while the CDMA terminal is in the CDMA service area, the CDMA subscriber is permitted access to the CDMA service. Additionally, the cardholder of the CDMA terminal of independent claim 5 is configured such that a SIM card of a GSM

subscriber may be installed or uninstalled and the card interface can similarly detect whether the SIM card is installed in the cardholder. In instances in which the card interface detects that the SIM card of a GSM subscriber is installed in the cardholder while the CDMA terminal is in the CDMA service area, the CDMA terminal is configured to transmit data to authenticate the GSM subscriber utilizing information relating to the GSM subscriber stored by the SIM card. Once the authentication of the GSM subscriber is completed, the CDMA terminal is operable as a roaming terminal for the GSM subscriber in the CDMA service area. Thus, the CDMA terminal of independent claim 5 includes a multi-purpose cardholder than can receive either a UIM card of a CDMA subscriber or a SIM card of a GSM subscriber.

In rejecting independent claim 5 as being obvious, the Office Action in paragraph 3 noted that Park “does not teach a cardholder for installing and uninstalling a user identity module (UIM) of a CDMA service subscriber; and a card interface for detecting whether a UIM card is installed in the cardholder, wherein when the card interface detects the UIM card of the CDMA service subscriber is installed in the cardholder in the CDMA service area, the CDMA service subscriber can use the CDMA service.” Thus, the Office Action cites Tayloe for its disclosure of a mobile phone with multiple subscriber SIM cards and multiple SIM card readers. The Office Action continues by determining that “it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Park, such that the mobile device has one single slot for multiple SIM/UIM cards to access various networks to provide an alternate method of accessing multiple networks for mobile phones without the capability to support multiple SIM/UIM cards simultaneously.” As such, the Office Action asserts that although neither Tayloe nor Park teach or suggest a single cardholder slot capable of receiving multiple cards, one of ordinary skill in the art would find motivation in the references to combine the teachings of Tayloe and Park to arrive at such a feature. Applicants respectfully traverse this analysis.

Applicants submit that one of ordinary skill would not be motivated by the teaching of Tayloe to modify Park to develop a common cardholder and a card interface capable of reading either a SIM or a UIM card and providing appropriate services responsive to the card and the service area of the CDMA terminal as claimed in independent claim 5. Applicants further submit that Tayloe, in fact, teaches away from a common cardholder having such characteristics.

As stated in the Office Action, Park “does not teach a cardholder for installing and uninstalling a user identity module (UIM) of a CDMA service subscriber; and a card interface for detecting whether a UIM card is installed in the cardholder, wherein when the card interface detects the UIM card of the CDMA service subscriber is installed in the cardholder in the CDMA service area, the CDMA service subscriber can use the CDMA service.” Meanwhile, Tayloe is directed to a radiotelephone (101) having multiple SIM cards (105) inserted into corresponding SIM card readers (107). In other words, Tayloe discloses a radiotelephone having multiple slots (i.e., multiple cardreaders) for receiving different respective SIM cards. There is no teaching of a common cardholder and card interface detecting either the SIM or UIM card as claimed in independent claim 5. To the contrary, Tayloe discloses that “it is especially desirable for a common phone to accept multiple universal number SIMs” (col. 4, lines 4-5). Tayloe goes on to disclose that such “multiple SIM capability” allows either a single person to be reachable by multiple phone numbers (i.e. work and personal numbers) (col. 3, line 66 to col. 4, line 3) or several different people to be reached at a common device (col. 4, lines 9-11). Thus, a common cardholder would frustrate the objective of Tayloe to allow simultaneous use by multiple users or multiple personalities of a single radiotelephone since the use would be in the alternate instead of concurrently. Accordingly, Tayloe fails to teach or suggest a common cardholder to alternately receive different cards, and in light of Tayloe’s express teaching of the advantages of having multiple cardholders to simultaneously hold multiple cards, one of ordinary skill in the art would not find motivation in either reference to make such a modification. Instead, it seems that it may only be through the teaching provided in Applicants’ own disclosure that such motivation could be identified.

Additionally, it should be noted that although Tayloe discloses use of multiple cards that may be associated with multiple networks (col. 4, lines 39-41), Tayloe fails to disclose use of a card for use in a first type of network having a first protocol (i.e. SIM card for a GSM subscriber) to provide service in a second type of network having a second protocol (i.e. CDMA network), as also recited in independent claim 5. Thus, a user in Tayloe requires multiple cards, such as a SIM card for GSM service in a GSM network, and a UIM card for CDMA service in a CDMA network.

Moreover, even if the references were combined, albeit improperly in Applicants' opinion as described above, Applicants submit that the combination of the references does not teach or suggest a CDMA terminal of independent claim 5. In this regard, the combination of the cited references do not teach or suggest a CDMA terminal having a common cardholder and card interface for receiving both UIM cards and SIM cards and detecting which type of card, if any, has been received by the cardholder, as recited by independent claim 5. Instead, Applicants submit that the combination of Park and Tayloe would result in a CDMA terminal having multiple different interfaces and cardholders, each receiving a different SIM card, since neither reference teaches or suggest that such functions could be provided by the same cardholder and card interface. In this regard, since there would be multiple interfaces for receiving different cards, there would be no need for the card interface to be configured to determine which type of card was inserted as recited by independent claim 5.

For each of the foregoing reasons, Applicants submit that the rejections of independent claim 5, as well as claims 6 and 7 which depend therefrom, are overcome.

#### Claims 8-12

The Office Action rejected claims 8-10 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Park in view of Kulkarni et al. (U.S. Patent No. 5,862,481, hereinafter "Kulkarni"). Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Park in view of Kulkarni and further in view of Brown et al. (U.S. Patent No. 5,537,474, hereinafter "Brown")

Independent claim 8 has been amended to recite, *inter alia*, a CDMA terminal having a cardholder and a card interface device for detecting which one, if any, of a UIM of a CDMA subscriber and the SIM of the GSM subscriber is installed in the cardholder. Thus, an exemplary embodiment according to independent claim 8 includes a CDMA terminal having a common cardholder that distinguishes between a SIM card and a UIM card and provides CDMA service to either a CDMA subscriber or a GSM subscriber, respectively, via a card interface device that distinguishes between the SIM and UIM cards. In other words, a card interface device of a CDMA terminal provides CDMA service to subscribers of different networks responsive to whether a SIM or UIM card is disposed in a common cardholder.

As stated above, Park fails to teach or suggest a CDMA terminal having a cardholder and a card interface device for detecting which one, if any, of a UIM of a CDMA subscriber and the SIM of the GSM subscriber is installed in the cardholder as claimed in independent claim 8. Kulkarni discloses an interworking proxy system for translating between management protocols. Additionally, Brown discloses a method and apparatus for authenticating a roaming subscriber. Both Kulkarni and Brown fail to teach or suggest a CDMA terminal having a cardholder and a card interface device for detecting which one, if any, of a UIM of a CDMA subscriber and the SIM of the GSM subscriber is installed in the cardholder as claimed in independent claim 8.

Since Park, Kulkarni and Brown each fail to teach or suggest a CDMA terminal having a cardholder and a card interface device for detecting which one, if any, of a UIM of a CDMA subscriber and the SIM of the GSM subscriber is installed in the cardholder as claimed in independent claim 8, any combination of the cited references also fails to teach or suggest the subject matter of independent claim 8. Thus, the cited references, taken either individually or in combination, do not render independent claim 8 obvious. Claims 9-12 depend either directly or indirectly from independent claim 8 and thus include all the recitations of independent claim 8. The dependent claims 9-12 are therefore patentable for at least the same reasons as given above for independent claim 8.

As stated above, dependent claims 9-12 are at least patentable due to their dependency on independent claim 8. However, dependent claims 9-12 recite additional features that patentably distinguish the claimed invention from the cited references. For example, claim 11 recites, *inter alia*, the authentication parameter comprises an SRES parameter and a RAND parameter, wherein the IRGS is configured to provide the RAND parameter to the CDMA terminal and to receive another SRES parameter from the CDMA terminal in response to the provision of the RAND parameter, and wherein the IRGS is configured to request the HLR in the GSM system to send the authentication parameter regarding the CDMA terminal, and to store the authentication parameter received by the HLR in response to the request, and to compare the SRES parameters in order to verify the GSM subscriber. In other words, the HLR in the GSM network sends the RAND and SRES. To the contrary, as stated in the Office Action, Kulkarni discloses that an IGP (cited as analogous to the IRGS) generates RAND and SRES. Similarly, Brown discloses in Figures 4, 5 and 7 that a subscriber unit (SU) and a subscriber identity unit (SIU) generate the

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RAND and SRES and not the HLR as claimed in claim 11. Additionally, as further stated in the Office Action, Park is silent on the authentication parameter comprising RAND and SRES parameters.

Since Park, Kulkarni and Brown each fail to teach or suggest the IRGS is configured to request the HLR in the GSM system to send the authentication parameter regarding the CDMA terminal as claimed in claim 11, any combination of the cited references also fails to teach or suggest the subject matter of claim 11.

Accordingly, for all the reasons stated above, Applicants respectfully submit that the rejections of claims 8-12 are overcome.

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**Conclusion**

In view of the amended claims and the remarks presented above, it is respectfully submitted that all of the claims in the present application are in condition for immediately allowance. It is therefore requested that a Notice of Allowance be issued. The Examiner is encouraged to contact Applicants' undersigned attorney to resolve any remaining issues in order to expedite examination of the present application.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,




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